

PROGRAMMABLE LOGIC ARRAY INTEGRATED CIRCUITS

ABSTRACT OF THE DISCLOSURE

5 A programmable logic array integrated circuit
has a number of programmable logic modules which are
grouped together in a plurality of logic array blocks
("LABs"). The LABs are arranged on the circuit in a two
dimensional array. A conductor network is provided for
interconnecting any logic module with any other logic
10 module. In addition, adjacent or nearby logic modules
are connectable to one another for such special purposes
as providing a carry chain between logic modules and/or
for connecting two or more modules together to provide
more complex logic functions without having to make use
15 of the general interconnection network. Another network
of so-called fast or universal conductors is provided for
distributing widely used logic signals such as clock and
clear signals throughout the circuit. Multiplexers can
be used in various ways to reduce the number of
20 programmable interconnections required between signal
conductors.